



Research • Technology
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Association of Biomolecular Resource Facilities

Business Office:

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Re: gPRG2010 Quantitative Glycoprotein Study Participation Request

October 12, 2009

Dear Fellow ABRF Member:

One of the analytical challenges facing scientists in the characterization of glycoproteins involves the ability to identify and quantify changes in the attached glycans. This topic is of importance to a variety of researchers that ranges from those involved in the batch-to-batch analysis of recombinant glycoproteins to those involved in glycomics. Of particular interest to the Glycoprotein Research Group (gPRG) is that there are numerous published methodologies for quantitatively identifying glycan changes, but there has yet to be a multi-laboratory study to assess the performance of these various approaches. The Glycoprotein Research Group (gPRG) of the Association of Biomolecular Resource Facilities (ABRF) would like to invite you to participate in a study that explores the use of different approaches for determining the relative differences in N-glycosylation between three similar glycoprotein samples.

For this first study the gPRG anticipates that these samples can be successfully characterized by skilled scientists using a wide variety of glycoanalytical techniques (*e.g.* ESI or MALDI of labeled or unlabeled glycans, NP-HPLC or RP-HPLC of fluorescently labeled glycans, *etc.*). The primary goal of this study is to document the breadth of approaches used by the ABRF community and highlight the type of information obtained from these experiments. Participants will be asked to:

- Identify the major N-linked glycans detected in three similar glycoprotein samples
- Determine any differences in the distribution of the N-linked glycans in the three mixtures – relative quantitative analysis
- Provide a 1-2 page description of the methods used to analyze these glycoprotein samples

The gPRG will compile descriptions of the experimental methods that were used and highlight methods that successfully determined known differences in the sample sets. This information will be presented at the 2010 ABRF Meeting (March 20 – 23, 2010 in Sacramento, California) and will be published on the ABRF website so that other researchers can compare results and adopt best practices.

The gPRG expects to distribute the samples in October 2009 and requests that the resulting data be returned by December 15, 2009. If your facility places restrictions on the types of biological samples it can receive, please include the text "more information" in the subject line of your request and we will send you additional information about the nature of the study samples in order to expedite delivery.

Requests for samples must be submitted by e-mail to gprg2010@gmail.com prior to October 31, 2009. Please include the words "gPRG SAMPLE REQUEST" in the subject line to indicate that you are requesting samples for the gPRG2010 Quantitative Glycoprotein Study. The body of the e-mail should contain, the name of the scientist requesting the sample, mailing address, and phone number.

Because of the significant effort that goes into the preparation of the samples by the gPRG, the research group asks that a sample set only be requested if there is a reasonable probability you will be able to return data by the deadline. Similarly, each participant should only request one sample set. As in the past, result submissions will be coded to ensure anonymity of the participating laboratories.

We thank you for your support of the ABRF and look forward to your participation in this study.

Sincerely,

The ABRF Glycoprotein Research Group:

Ron Orlando (Chair) – University of Georgia

Rodney Keck – Genentech, Inc.

Joseph Zaia – Boston University

Wolfgang Egge-Jacobsen – University of Oslo

Karen R. Jonscher (EB Liaison) – University of Colorado Denver Health Sciences Center